In the Claims:

Please and amend the claims as shown in the following amended listing of claims:

CLAIMS:

(I)

1. (Currently amended) A compound according to the formula (1)

wherein Z is selected from the group consisting of -S(O)2- and -C(O)-.

when Z is $-S(O)_2$ -, R_a is selected from the group consisting of: -R1 and -N(R1)(R3), or

when Z is -C(O)-, R_a is selected from the group consisting of: -R1, -OR1, -N(R1)(R3) and -SR1.

where R1 is selected from the group consisting of:

-C₁-C₁₁ alkyl, wherein each carbon may be optionally substituted with one, two or three X substituents,

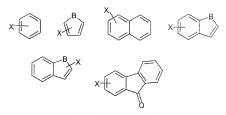
-C₃-C₁₀ cycloalkyl, wherein each carbon may be optionally substituted with one or two X substituents,

-(CH2)aQp(CH2)aW, and

-(CH₂)_nCHW₂;

wherein each carbon of -(CH₂)_n- may be optionally substituted with one or two X substituents, Q is O, S, or NR3, n is independently an integer 0-6, p is independently an integer 0 or 1, and W is independently selected from the group consisting of hydrogen, C₃-C₁₀ cycloalkyl, -(C₃-C₁₀ cycloalkyl)aromatic, and one of the following aromatic or heteroaromatic rings:

-2-



where B is selected from the group consisting of: -O-, -S-, -NR6-; where each carbon of the aromatic or heteroaromatic ring may be independently substituted replaced by a nitrogen atom, and each carbon of the aromatic ring may be independently substituted with an X substituent;

where each X substituent is independently selected from the group consisting of: hydrogen, halogen, methylenedioxy, -C₁-C₈ alkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms, -C₃-C₁₀ cycloalkyl, substituted or unsubstituted phenyl, -C₁-C₈ alkoxy, -SR3, -OH, [[=O,]] -CY3, -OCY3, -CO₂R3, -CN, -CO-NR4R5, -NO₂, -COR3, -NR4R5, -NH-C(O)-R3, -NH-C(O)-(C₁-C₆ alkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms.)-aromatic, and -NH-C(O)-(C₁-C₆ alkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms.)-heteroaromatic:

where <u>said</u> phenyl <u>when substituted</u> is substituted with one to five substituents independently selected from the group consisting of hydrogen, halogen, methylenedioxy, -C₁-C₈ alkylene <u>saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms, -C₃-C₁₀ cycloalkyl, -C₁-C₈ alkoxy, -OH, -CY₃, -OCY₃, -CO₂R₃, -CN, -NO₃, -COR₃, -SR₃, and -NH-C(O)-R₃; where each Y is independently selected from the group consisting of</u>

where each R3 is independently selected from the group consisting of hydrogen, and C₁-C₈ alkylene saturated or unsaturated, straight or

hydrogen and halogen:

branched chain hydrocarbyl radical of from one to eight carbon atoms, where C₁-C₈ alkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms may be straight or branched, saturated or unsaturated:

where each R4 and R5 is independently selected from the group consisting of hydrogen, and C1-C6 alkylene-saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms, where C₄ C₆ alkylene may be straight or branched saturated or unsaturated, where which each carbon of C1-C6 alkylene-saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms is optionally substituted with a hydrogen, halogen, methylenedioxy, -C1-C8 alkylene, -C3-C10 cycloalkyl, substituted or unsubstituted phenyl, -C1-C8 alkoxy, -SR3, -OH, [[=O,]] -CY3, -OCY3, -CO2R3, -CN, -NO2, -COR3, -NH-C(O)-R3, -NH-C(O)-(C1-C6 elkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-aromatic, or -NH-C(O)-(C1-C6 alkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-heteroaromatic, or where said R4 and said R5 taken together with the nitrogen to which they are attached, form a single heterocyclic ring of three to seven atoms including the nitrogen atom as the sole heteroatom:

where -NR6- is selected from the group consisting of an N substituted with -hydrogen, -(C₁-C₆ elleylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms), -C₃-C₁₀ cycloalkyl, -S(O)₂-(C₁-C₆ elleylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms), -S(O)₂-(C₃-C₁₀ cycloalkyl), -C(O)R3, -C(O)-(C₁-C₆ elkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-aromatic, -C(O)-aromatic, S(O)₂-aromatic and -S(O)₂-(C₁-C₆ elkylene saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-aromatic, wherein each carbon of the aromatic ring may be optionally substituted with an X substituent; and

R2 is selected from the group consisting of cyclopentyl, cyclopentenyl, and isopropyl;

or a pharmaceutically acceptable salt, optical isomer, solvate or hydrate thereof.

(Canceled)

- (Previously presented) A method of treating a hyperproliferative disorder in a patient by administration of a compound according to claim 1.
- (Previously presented) The method according to claim 3, wherein the hyperproliferative disorder is a neoplastic disease.
- 5. (Currently amended) The method according to claim 4, wherein the neoplastic disease is selected from the group consisting of: leukemia, carcinoma, adenocarcinoma, sarcoma, melanoma and a mixed type of neoplasm selected from the group consisting of: carcinosarcoma, lymphoid tissue type follicular reticulum cell sarcoma and Hodgkins Disease.
- (Previously presented) The method according to claim 5, wherein the leukemia is selected from the group consisting of: acute lymphoblastic leukemia, chronic leukemia and acute myeloblastic leukemia.
- 7. (Previously presented) The method according to claim 5, wherein the carcinoma is selected from the group consisting of: cervix carcinoma, breast carcinoma, prostate carcinoma, esophagus carcinoma, stomach carcinoma, small intestine carcinoma, colon carcinoma, ovary carcinoma and lungs carcinoma.
- (Previously presented) The method according to claim 5, wherein the adenocarcinoma is selected the group consisting of: cervix adenocarcinoma, breast adenocarcinoma, prostate adenocarcinoma, esophagus adenocarcinoma, stomach adenocarcinoma, small intestines adenocarcinoma, colon adenocarcinoma, ovary adenocarcinoma and lungs adenocarcinoma.
- (Previously presented) The method according to claim 5, wherein the sarcoma is selected from the group consisting of: oesteroma, osteosarcoma, lipoma, lipsarcoma, hemangiomas and hemangiosarcoma.

 (Previously presented) The method according to claim 5, wherein the neoplastic disease is melanoma selected from the group consisting of: amelanotic melanoma and melanotic melanoma.

11. (Canceled)

- (Currently amended) A method of treating a non-neoplastic disease hyperproliferative disorder in a patient by administration of a compound according to claim 1.
- 13. (Previously presented) The method according to claim 12, wherein the non-neoplastic disease is selected from the group consisting of: allograft rejection, restinosis and an autoimmune disease.
- 14. (Previously presented) The method according to claim 13, wherein the autoimmune disease is selected from the group consisting of: rheumatoid arthritis, Type 1 diabetes, atherosclerosis, and asthma.
- 15. (Previously presented) A method of preventing apoptosis of cells in a patient by administration of a compound according to claim 1.
- (Previously presented) The method according to claim 15, wherein the cells are neuronal cells.
- (Previously presented) The method according to claim 15, wherein apoptosis is induced by antineoplastic agents.
- (Previously presented) The method according to claim 15, wherein apoptosis is induced by cerebrovascular disease.
- (Previously presented) The method according to claim 15, wherein apoptosis is induced by stroke or infarction.
- (Canceled)

- (Previously presented) A method of protecting neuronal cells from damage induced by antineoplastic agents, comprising administering a compound according to claim 1.
- (Currently amended) A method of inhibiting cyclin-dependent kinases (CDKs) by administering a compound according to claim 1 wherein the complex is selected from the group consisting of CDK1, CDK2 and CDK4.
- 23. (Currently amended) The method according to claim 22, wherein the CDK is a constituent of a complex selected from the group consisting of CDK1/cyclin B, CDK2/cyclin E, and CDK4/cyclin D wherein the CDK4/cyclin D is selected from the group consisting of CDK4/cyclin D1, CDK4/cyclin D2 and CDK4/cyclin D3 and the complex is inhibited.
- 24. (Previously presented) A compound according to claim 1 of the formula

- 25. (Previously presented) A compound according to claim 24 wherein Z is -C(O)-.
- 26. (Previously presented) A compound according to claim 24 wherein Z is -S(O)2-.
- (Previously presented) A compound according to claim 25 wherein R₀ is selected from the group consisting of: -OR1 and -N(R1)(R3).
- (Previously presented) A compound according to claim 25 wherein R_a is -SR1.

- 29. (Previously presented) A compound according to claim 27 wherein Ra is -OR1.
- 30. (Previously presented) A compound according to claim 27 wherein Ra is -N(R1)(R3).
- 31. (Previously presented) A compound according to claim 1 wherein R2 is cyclopentyl.
- (Previously presented) A compound according to claim 1 wherein R1 is -(CH₂)_BQ_D(CH₂)_BW.
- (Previously presented) A compound according to claim 30 wherein R1 is -(CH₂)_nQ_p(CH₂)_nW.
- (Currently amended) A compound according to claim 33 wherein W is selected from the group consisting of:

where B is -O-, -S-, -NR6-, where each carbon of the aromatic or heteroaromatic ring may be independently substituted replaced by a nitrogen atom, and each carbon of the aromatic ring may be independently substituted with an X substituent.

 (Previously presented) A compound according to claim 34 wherein W is phenyl, each carbon of which may be independently substituted with an X substituent.

36-44. (Canceled)

- 45. (Previously presented) The method according to claim 22, wherein the CDK is selected from the group consisting of CDK1-8.
- (Previously presented) The method according to claim 45, wherein the CDK is selected from the group consisting of CDK1, CDK2 and CDK4.
- 47. (Canceled)
- 48 (Previously presented) The method according to claim 23, wherein the cyclin D is cyclin D1.
- (Previously presented) The method according to claim 6, wherein the leukemia is chronic mylocytic leukemia.